

2-way, Characterized Control Valve, Stainless Steel Ball and Stem









Type overview	
Туре	DN
B264	65

Technical data

Functional data

Valve size [mm]	2.5" [65]
Fluid	chilled or hot water, up to 60% glycol
Fluid Temp Range (water)	0212°F [-18100°C]
Body Pressure Rating	400 psi
Close-off pressure ∆ps	100 psi
Flow characteristic	equal percentage
Pipe connection type	Internal thread NPT (female)
Servicing	maintenance-free
Flow Pattern	2-way
Leakage rate	0% for A – AB
Controllable flow range	75°
Cv	150
Valve body	Nickel-plated brass body
Stem	stainless steel
Stem seal	EPDM (lubricated)
Seat	PTFE
Characterized disc	TEFZEL®
O-ring	EPDM (lubricated)

Suitable actuators

Materials

O-ring Ball

Non-Spring	ARB(X)
Spring	AFRB(X)

Safety notes



 WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

stainless steel

Product features

Application

This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box reheat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.



Flow/Mounting details

A AB 100%

Two-way valves should be installed with the disc upstream.

Two way valves should be ins	disc upstream.	A → AB 100%	A → AB 100%		
Dimensions					
Type B264	DN 65		Weight 8.1 lb [3.7 kg]		
	ARB, ARX			C	
	A 10.1"	B [257] 5.6" [141] 8	C D 8.0" [203] 6.0" [152]	E F 2.8" [71] 2.8" [71]	H1 1.9" [48]
	AFRB, AFRX			L c	
	A 11.5"	B [293] 5.6" [141]	C D 8.6" [219] 6.6" [E 168] 2.0" [51]	F 2.0" [51]
	ARQB, ARQX			<i>c</i>	

В

4.2" [107]

9.9" [251]

C

8.1" [206]

D

6.1" [155]

Ε

2.3" [58]

F

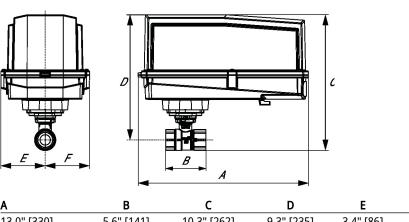
H1

0.8" [20]

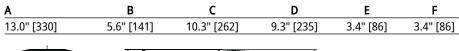
H2

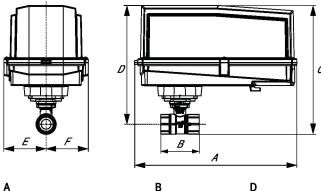
0.6" [15]





AFRB N4, AFRX N4





ARB N4, ARX N4, NRB N4, NRX N4

A	В	D	E	F
11.4" [289]	5.6" [141]	8.0" [203]	3.1" [80]	3.1" [80]



On/Off, Spring return, 24 V



Technical data		
Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	5 W
	Power consumption in rest position	2.5 W
	Transformer sizing	7.5 VA
	Auxiliary switch	2x SPDT, 1 mA3 A (0.5 A inductive), DC 5 VAC 250 V, 1x 10% / 1x 1190%
	Switching capacity auxiliary switch	1 mA3 A (0.5 A inductive), DC 5 VAC 250 V
	Electrical Connection	(2) 18 GA appliance cables, 3 ft [1 m], with 1/2" NPT conduit connectors
	Overload Protection	electronic throughout 095° rotation
Functional data	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Angle of rotation	90°
	Running Time (Motor)	75 s / 90°
	Running time fail-safe	<20 s
	Noise level, motor	45 dB(A)
	Noise level, fail-safe	62 dB(A)
	Position indication	Mechanical
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02
		CE acc. to 2014/30/EU and 2014/35/EU
	Quality Standard	ISO 9001
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-22122°F [-3050°C]
	Storage temperature	-40176°F [-4080°C]
	Servicing	maintenance-free
Weight	Weight	5.7 lb [2.6 kg]



Technical data

Materials Housing material Galvanized steel and plastic housing

Footnotes †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

Electrical installation

INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

 $\mathbf{\chi}$ Provide overload protection and disconnect as required.

Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

Actuators may be powered in parallel. Power consumption must be observed.

A Parallel wiring required for piggy-back applications.

Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.

Meets cULus requirements without the need of an electrical ground connection.

Warning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

Wiring diagrams

On/Off

